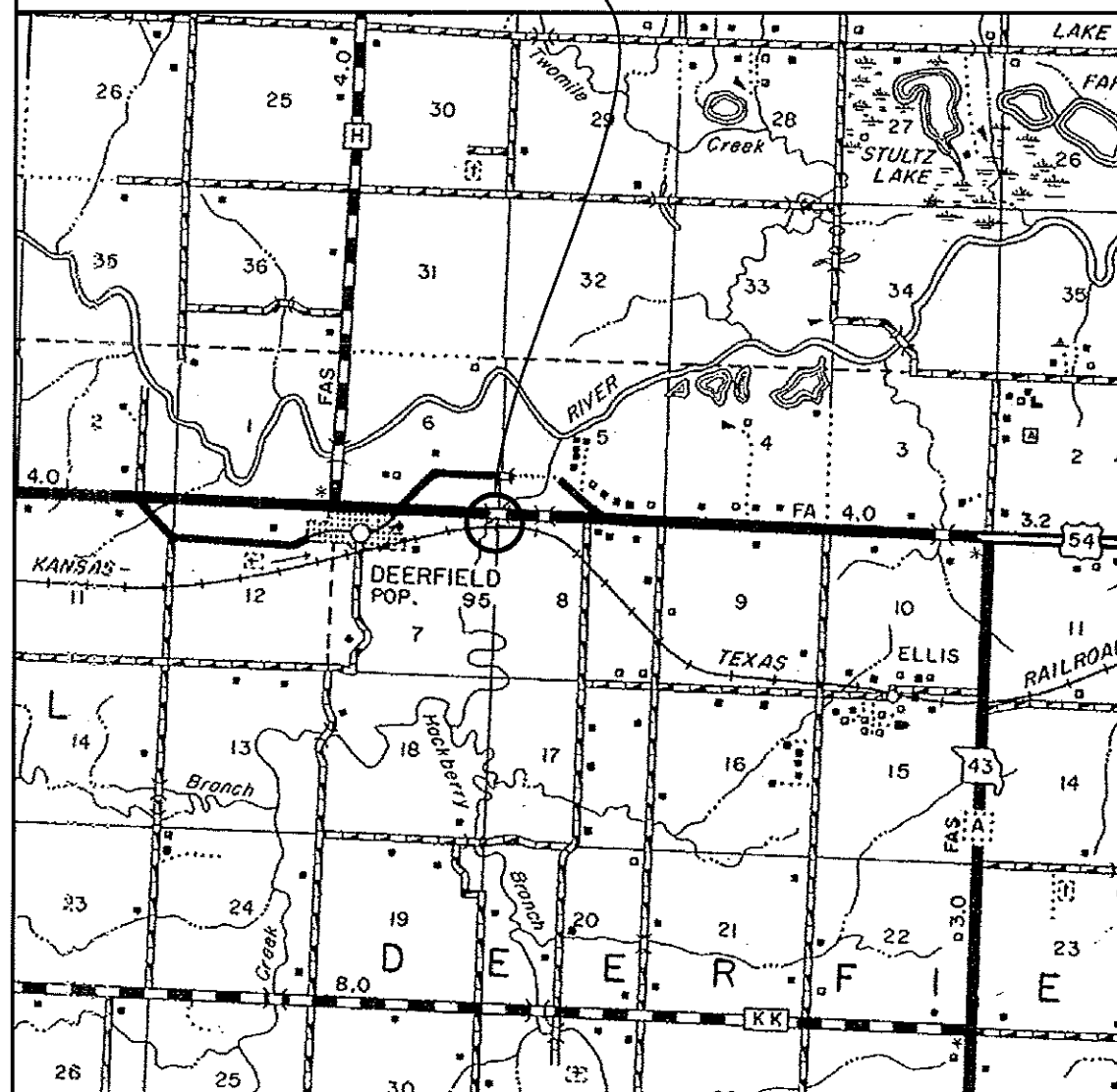


# Big Dry Wood Creek Bank Stabilization DSR 217-10-001 EWP Project

NE  $\frac{1}{4}$ , NE  $\frac{1}{4}$ , Section 7 Township 35N, Range 32W  
Lat=37°50'25"N; Long=94°29'34"W  
Vernon County, Missouri

Project Location



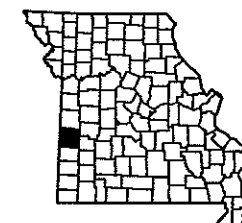
## NOTES:

1. Missouri law requires that any person making or beginning any excavation notify all underground facility owners/operators which may be affected by said excavation at least two but not more than ten working days in advance, except in the case of an emergency. A "working day" is everyday, except Saturday, Sunday, or a legally declared local, state or federal holiday.
2. To make this notification and locate all utilities at the site or on ingress / egress roads prior to excavation, contact the Missouri One Call system and submit a locate request. The phone number for the Missouri One Call System is 800-344-7483 (1-800-DIG-RITE).
3. The contact numbers for technical assistance concerning the plan set are as follows:

Sponsor Liason: Michael Rinehart, MoDOT Engineer 417-448-9056  
Government Liason: Bruce Embrey, USDA Engineer 660-747-8200 x003  
John Feistner, USDA Engineer 417-831-5246 x124



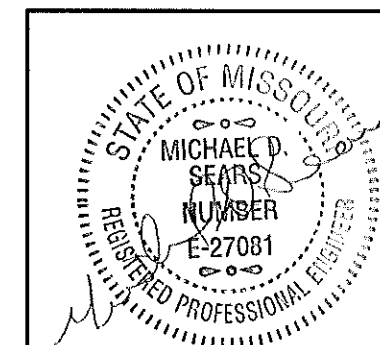
The excavator is responsible for having all utilities located at the site or on ingress road prior to beginning work. Missouri One Call Number is 800-344-7483 or 1-800-DIG-RITE. The landowner shall ensure that the excavator completes the utility locate request.



LOCATION IN MISSOURI

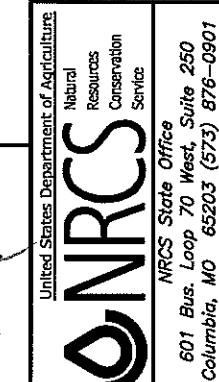
## SHEET INDEX

- Sheet -1- Cover Sheet
- Sheet -2- Existing Condition
- Sheet -3- Planned Construction
- Sheet -4- Contour Plan View
- Sheet -5- Armament Cross Sections
- Sheet -6- Bridge Cross Section



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COVER SHEET  
Big Dry Wood Creek Bank Stabilization  
DSR 217-10-001  
Vernon County, Missouri



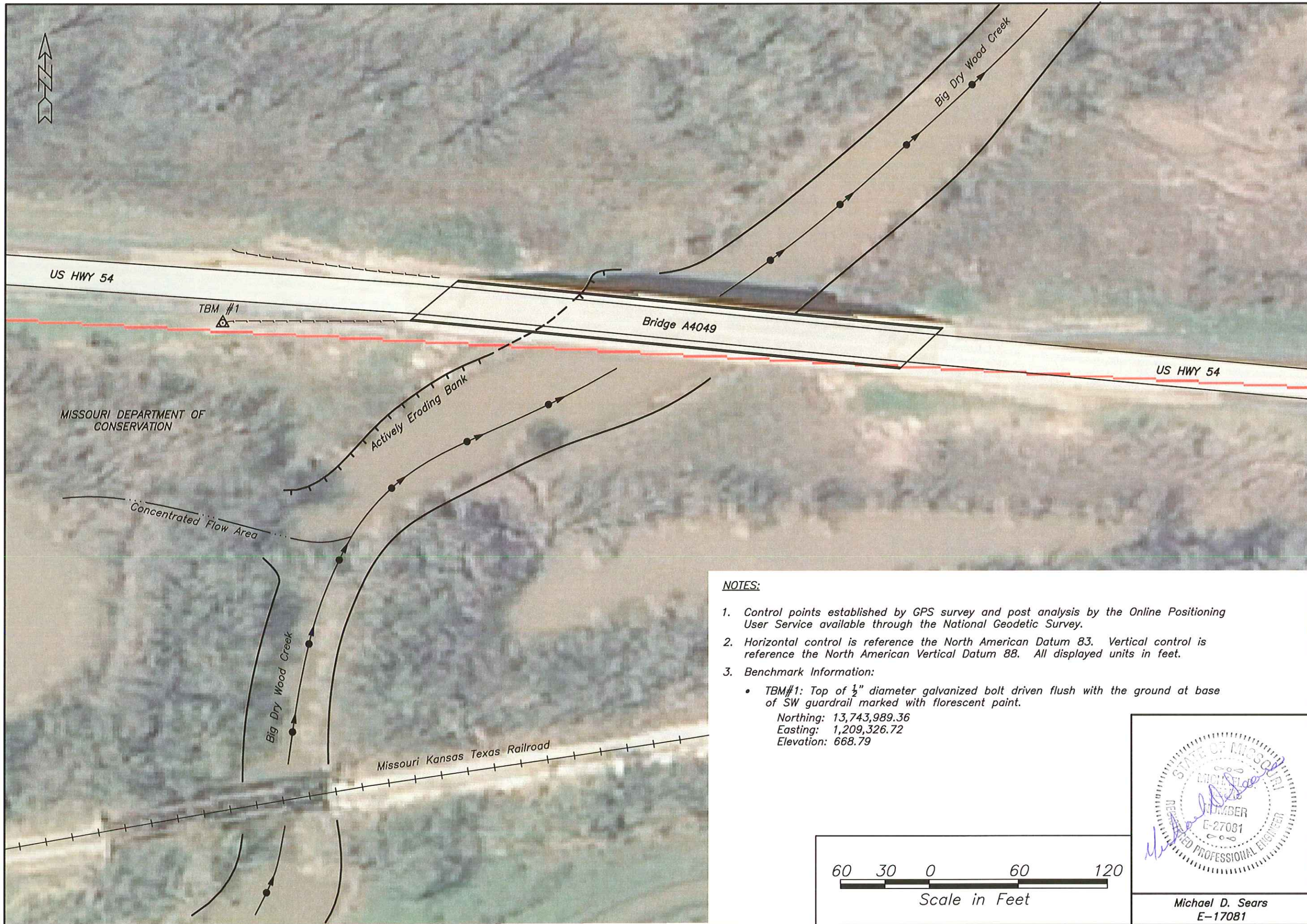
File Name

Drawing Name

11/29/10 14:48  
Sheet 1 of 6

Designed	MDS	Date	10/10
Drawn	MJM		10/10
Checked	DLW		11/10
Approved			





**NOTES:**

1. Control points established by GPS survey and post analysis by the Online Positioning User Service available through the National Geodetic Survey.
2. Horizontal control is reference the North American Datum 83. Vertical control is reference the North American Vertical Datum 88. All displayed units in feet.
3. Benchmark Information:
  - TBM#1: Top of  $\frac{1}{2}$ " diameter galvanized bolt driven flush with the ground at base of SW guardrail marked with florescent paint.  
Northing: 13,743,989.36  
Easting: 1,209,326.72  
Elevation: 668.79



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**EXISTING CONDITIONS**  
**Big Dry Wood Creek Bank Stabilization**  
**DSR 217-10-001**  
**Vernon County, Missouri**

Designed	MDS	Date	10/10
Drawn	MJM		10/10
Checked			
Approved			

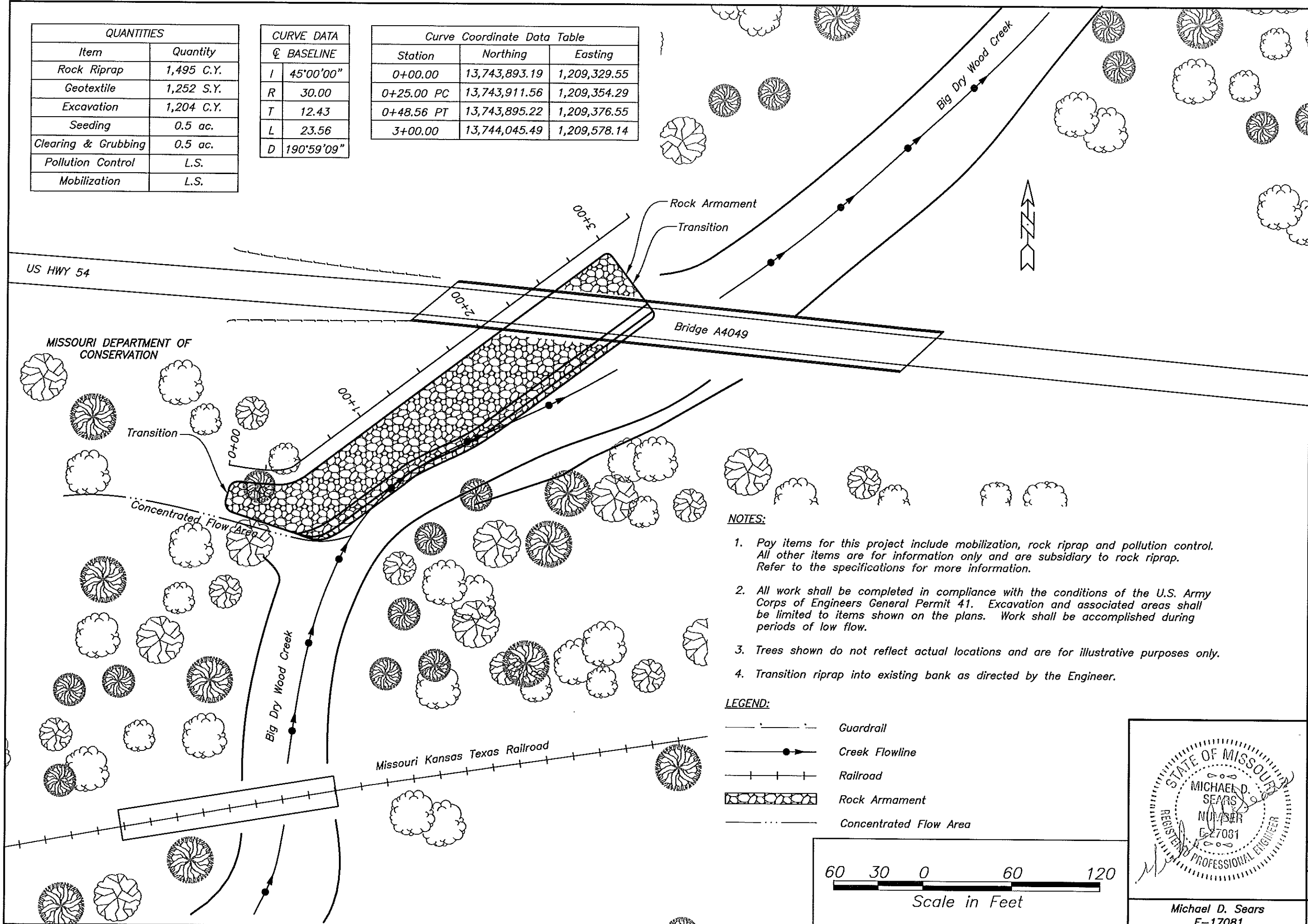
United States Department of Agriculture Natural Resources Conservation Service <b>NRCS</b> NRCS State Office 601 Bus. Loop 70 West, Suite 250 Columbia, MO 65203 (573) 876-0901	File Name	12/2/10 13:09
	Drawing Name	Sheet 2 of 6



QUANTITIES	
Item	Quantity
Rock Riprap	1,495 C.Y.
Geotextile	1,252 S.Y.
Excavation	1,204 C.Y.
Seeding	0.5 ac.
Clearing & Grubbing	0.5 ac.
Pollution Control	L.S.
Mobilization	L.S.

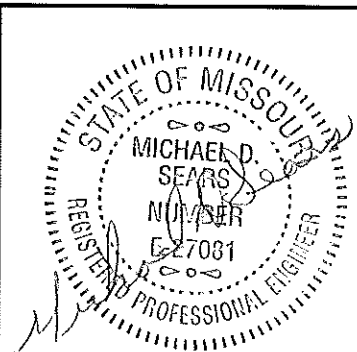
CURVE DATA	
¢ BASELINE	
I	45°00'00"
R	30.00
T	12.43
L	23.56
D	190°59'09"

Curve Coordinate Data Table		
Station	Northing	Easting
0+00.00	13,743,893.19	1,209,329.55
0+25.00 PC	13,743,911.56	1,209,354.29
0+48.56 PT	13,743,895.22	1,209,376.55
3+00.00	13,744,045.49	1,209,578.14



- NOTES:**
1. Pay items for this project include mobilization, rock riprap and pollution control. All other items are for information only and are subsidiary to rock riprap. Refer to the specifications for more information.
  2. All work shall be completed in compliance with the conditions of the U.S. Army Corps of Engineers General Permit 41. Excavation and associated areas shall be limited to items shown on the plans. Work shall be accomplished during periods of low flow.
  3. Trees shown do not reflect actual locations and are for illustrative purposes only.
  4. Transition riprap into existing bank as directed by the Engineer.

- LEGEND:**
- +—+—+— Guardrail
  - Creek Flowline
  - +—+— Railroad
  - ▨ Rock Armament
  - Concentrated Flow Area



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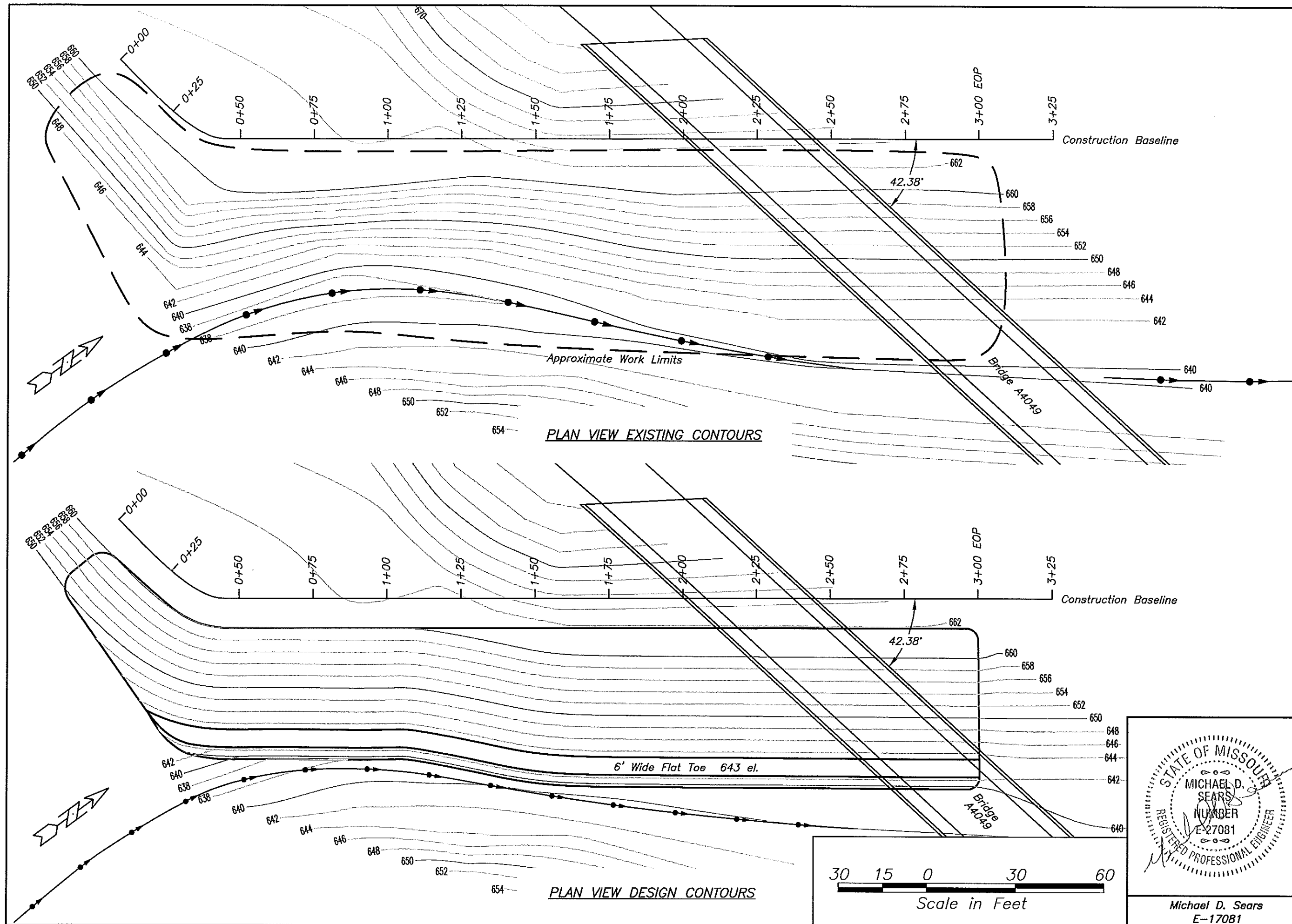
Date	10/10
Designed	MDS
Drawn	MJM
Checked	
Approved	

**PLANNED CONSTRUCTION**  
**Big Dry Wood Creek Bank Stabilization**  
**DSR 217-10-001**  
**Vernon County, Missouri**

United States Department of Agriculture  
**NRCS**  
 National Resources Conservation Service  
 NRCS State Office  
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File Name	
Drawing Name	
Sheet	3 of 6

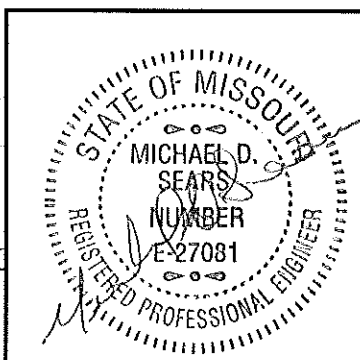
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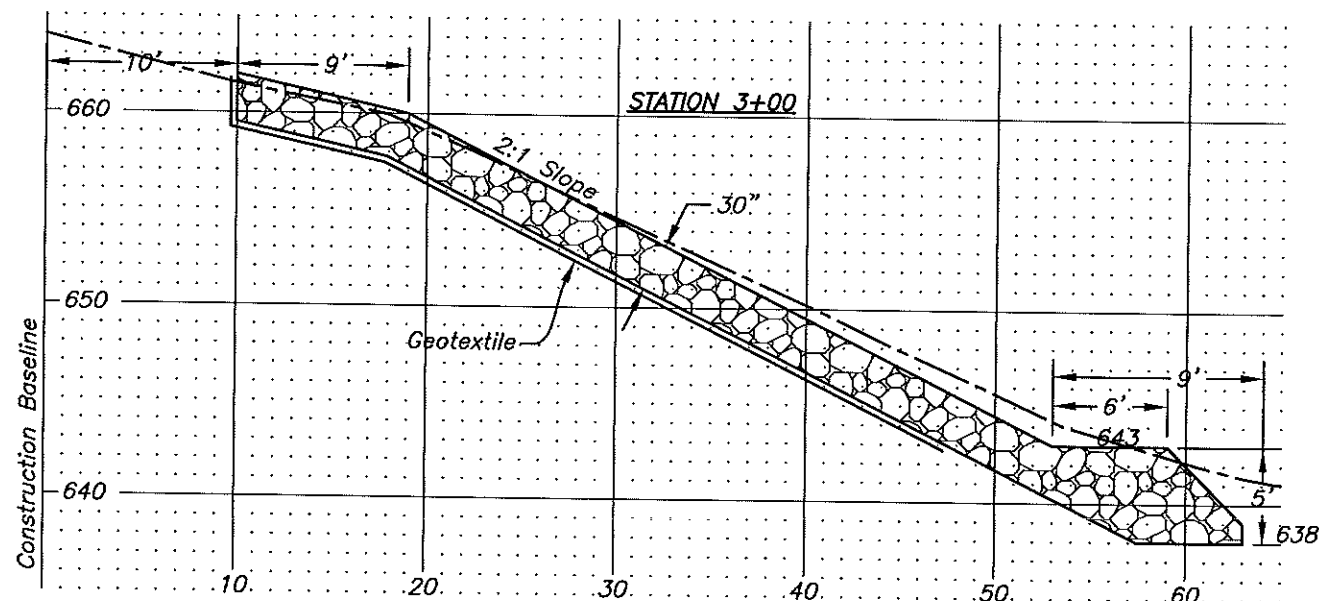
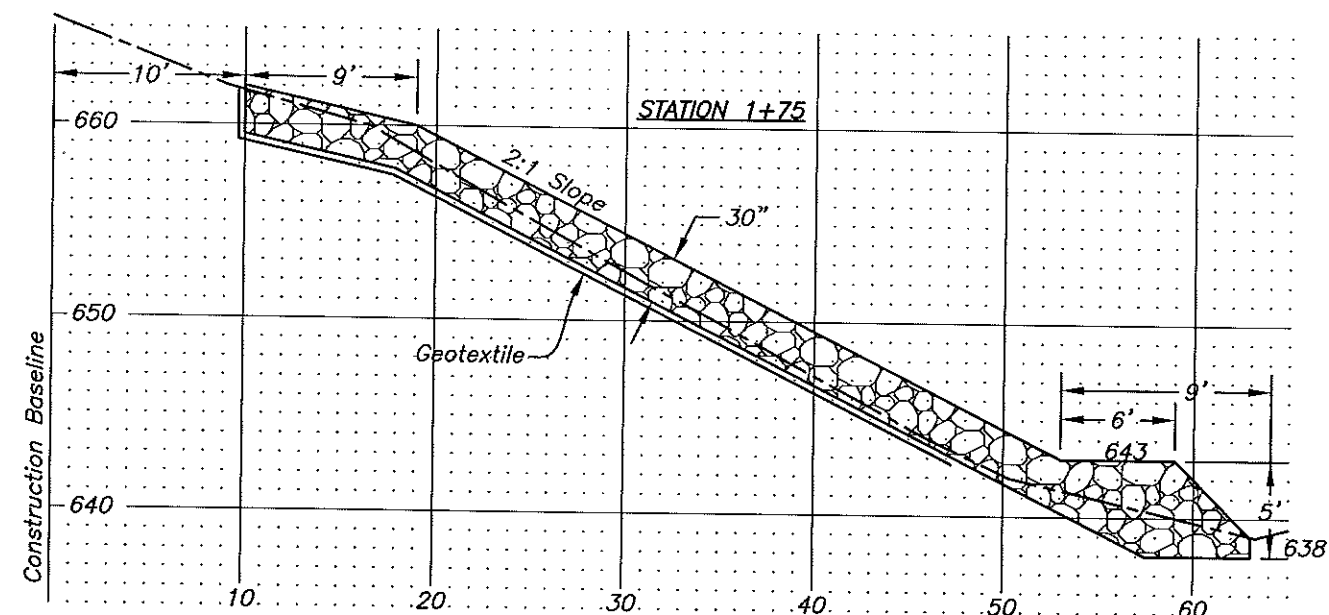
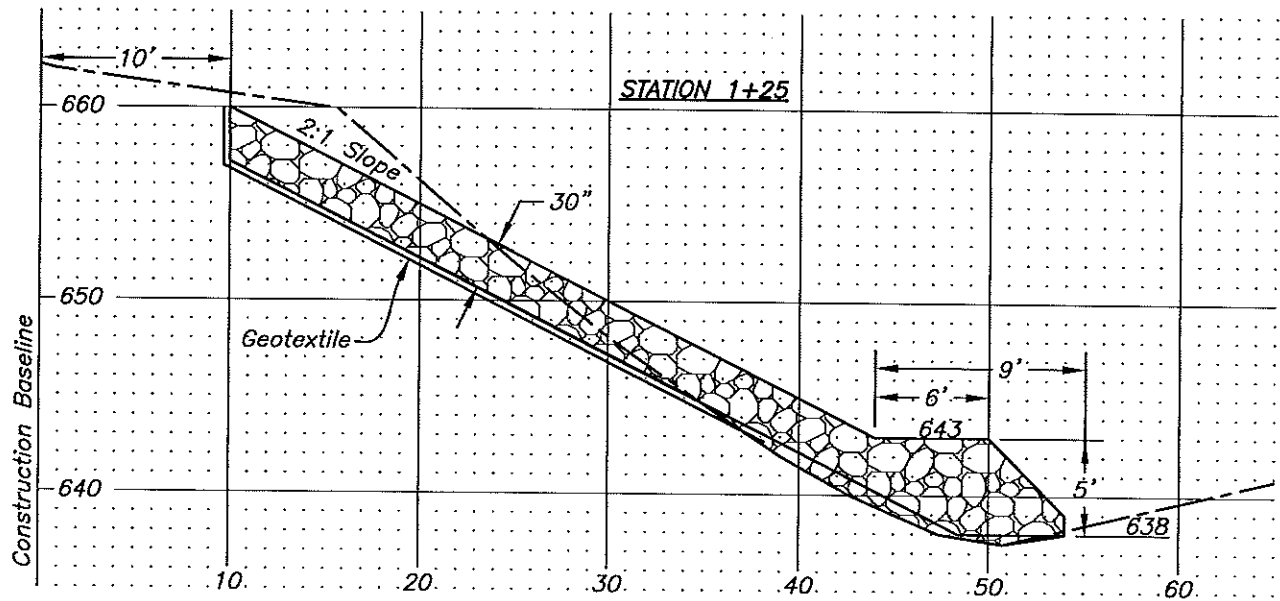
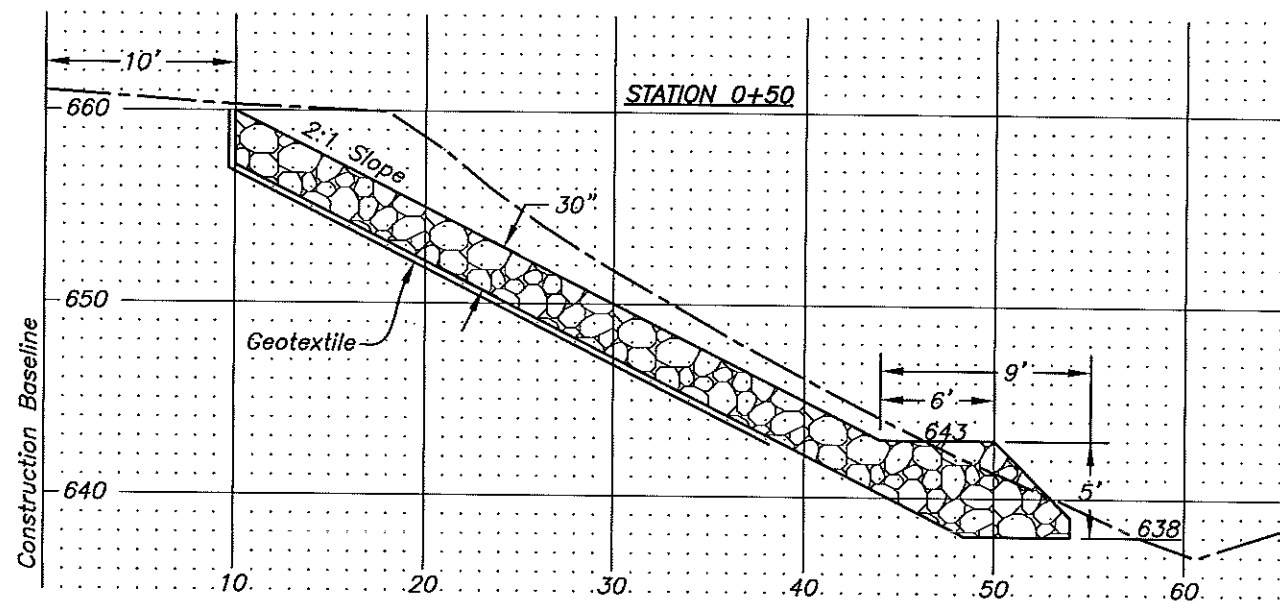
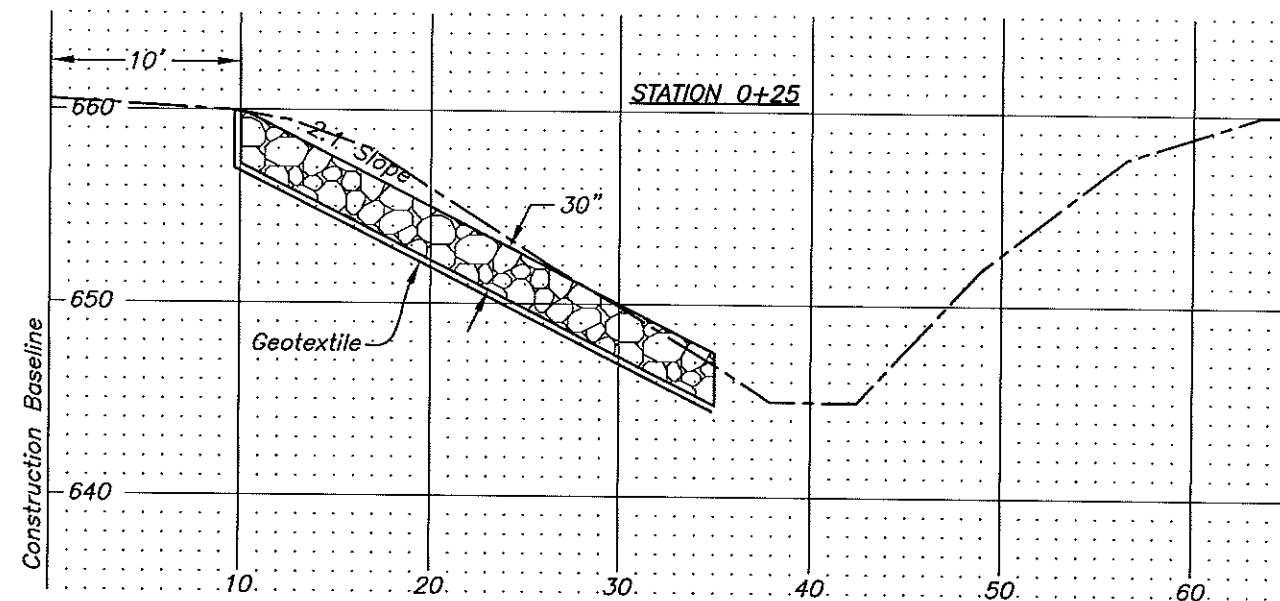
United States Department of Agriculture Natural Resources Conservation Service		NRCS State Office 601 Bus. Loop 70 West, Suite 250 Columbia, MO 65203 (573) 876-0901	
File Name		Drawing Name	
11/29/10 14:48		Sheet 4 of 6	

Designed	MDS	Date	10/10
Drawn	MJM		10/10
Checked	DLW		11/10
Approved			

**CONTOUR PLAN VIEW**  
**Big Dry Wood Creek Bank Stabilization**  
**DSR 217-10-001**  
**Vernon County, Missouri**



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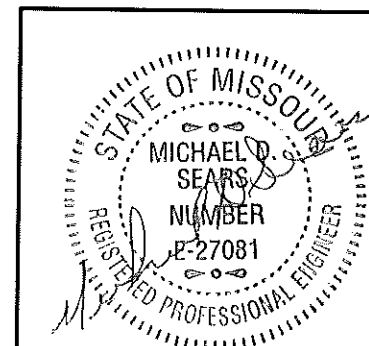
#### LEGEND:

- Existing Rock Outcrop
- Rock Armament
- Compacted Gravel
- Geotextile Fabric
- Existing Ground Line

#### NOTES:

1. Rock blanket shall be a minimum of 30" thick measured perpendicular to the slope. See Sheet 6 for required rock gradation.
2. Excavate and remove soil below existing ground line as shown to achieve proper armament placement depths.

STA	Cut (CY)	Rock (CY)	Rock (TN)	Geotextile (SY)
0+00	0	0	0	0
0+25	37.4	31.9	44.7	45.1
0+50	129.2	93.1	130.3	91.5
1+25	377.3	379.7	531.6	290.8
1+75	123.5	274.0	383.6	218.6
3+00	536.2	716.4	1003.0	600.3
TOTAL	1203.6	1495.1	2093.2	1252.3



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## ARMAMENT CROSS SECTIONS Big Dry Wood Creek Bank Stabilization DSR 217-10-001 Vernon County, Missouri

Designed MDS  
Drawn MJM  
Checked DLW  
Approved \_\_\_\_\_

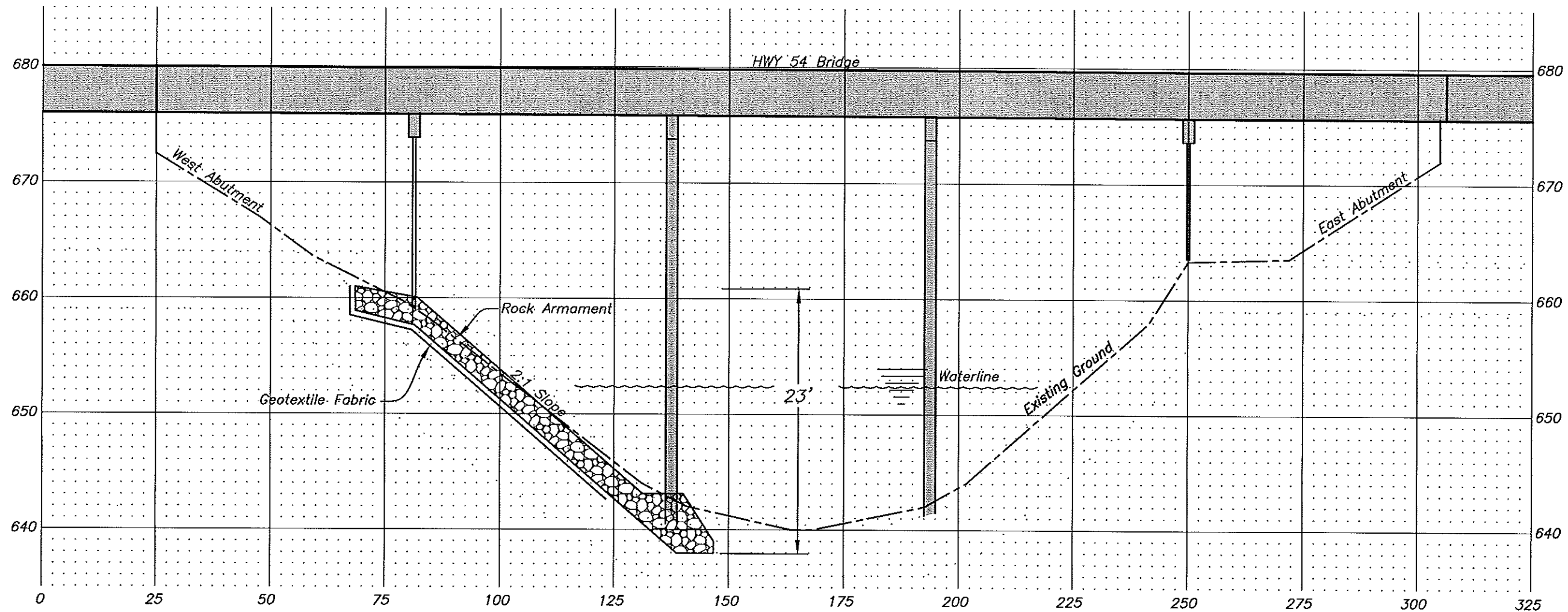
Date 10/10  
10/10  
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Natural Resources Conservation Service  
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Sheet 5 of 6



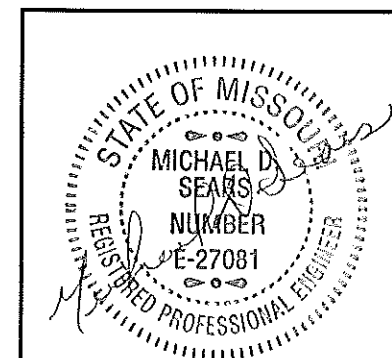
**BRIDGE SECTION**  
Viewing Downstream (North) Taken @ HWY CL

**NOTES:**

1. The rock blanket shall consist of rock that is sound, durable stone conforming to the displayed gradation. At contractor's option, the rock blanket may consist of rock meeting the requirements of MoDOT Type 4 Rock Ditch Liner.
2. Except as otherwise noted, placed rock shall be uniformly representative of the specified gradation. The rock may not be end dumped into place.
3. Larger rock shall be placed at the toe of the rock blanket to form a stable base for fill.
4. Geotextile shown shall be placed under all rock armament to protect in-situ soil to existing water elevation or 643 el, whichever is lower.
5. At splices the geotextile shall be overlapped a minimum of eighteen (18) inches and pinned to ground.
6. Geotextile shall be non-woven, minimum weight of fourteen (14) ounce/square yard and conform to Construction Specification 095, and Material Specification, 592, Geotextile.

**GRADATION OF ROCK**

PERCENT PASSING BY SIZE	SIZE (INCHES)
100	2.0 $D_{50} = 30"$
50-80	1.4 $D_{50} = 21"$
25-50	$D_{50} = 15"$
10-30	.5 $D_{50} = 8"$
0-5	.2 $D_{50} = 4"$



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**BRIDGE CROSS SECTION**  
**Big Dry Wood Creek Bank Stabilization**  
**DSR 217-10-001**  
**Vernon County, Missouri**

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